ABSTRACT

An aqueous hydrogen peroxide solution containing i) less than 50 wppm alkali metals, alkaline earth metals or combinations thereof in total, irrespective whether the alkali or alkaline earth metals are present in cationic or complex form; ii) less than 50 wppm of amines having a pk_B of less than 4.5 or the corresponding protonated compounds in total; and iii) at least 100 wppm anions or compounds that can dissociate to form anions in total, where the wppm are based on the weight of hydrogen peroxide and the concentration of hydrogen peroxide is more than 50 % by weight based on the total weight of the hydrogen peroxide solution. A process for preparation of said hydrogen peroxide solution and the use of said solution in a process for epoxidation of olefins is also disclosed.

LIT/826361.1